

CLAIMS

What is claimed is:

1. A system for rendering fonts into a memory comprising:
a data structure located within a memory or other memories; the data structure including at least one font array; and
a graphics controller for accessing said at least one font array and for rendering characters of said at least one font array into the appropriate locations of a memory or other memories.
2. The system of claim 1 wherein any of the memories comprises a frame buffer.
3. The system of claim 1 wherein any of the memories comprises a system memory.
4. The system of claim 1 in which said at least one font array includes a plurality of characters.
5. The system of claim 4 in which each of the characters comprises one bit per pixel.
6. The system of claim 4 in which each of the characters comprises a plurality of bits per pixels.
7. The system of claim 1 in which said at least one font array comprises a plurality of

2 font arrays.

1 8. The system of claim 7 in which each of the plurality of font arrays includes a
2 plurality of characters.

1 9. The system of claim 8 wherein characters within different font arrays can be
2 different sizes:

1 10. The system of claim 9 in which each of the characters comprises a bit per pixel.

1 11. The system of claim 9 in which each of the characters comprises a plurality of bits
2 per pixel.

1 12. The system of claim 9 in which each of the characters includes size height
2 information.

1 13. The system of claim 9 in which each of the characters includes size width
2 information.

1 14. The system of claim 1 in which the graphics controller comprises:
2 a set of registers for utilizing the information within the plurality of font arrays
3 such that font characters can be efficiently retrieved from memory and can then be rendered in the
4 memory.

1 15. The system of claim 14 in which the set of registers includes a font pointer
2 register.

1 16. The system of claim 14 in which the set of registers includes a font pitch register.

1 17. The system of claim 14 in which the set of registers includes an index register.

1 18. The system of claim 14 which includes a horizontal information register.

19. The system of claim 14 which includes a vertical information register.

20. The system of claim 14 which includes a linear information register.

21. The system of claim 14 in which the set of registers further includes a glyph
information register which holds character information retrieved by the graphics controller based
upon the font pointer register.

1 22. The system of claim 14 in which the set of registers further includes a glyph
2 information register which holds character information retrieved by the graphics controller based
3 upon the font pitch register.

1 23. The system of claim 14 in which the set of registers further includes a glyph
2 information register which holds the character information retrieved by the graphics controller

3 based upon the index register.

1 24. The system of claim 14 in which the set of registers includes a size width register.

1 25. The system of claim 14 in which the set of registers includes a size height register.

1 26. A method for rendering fonts into a memory, comprising the steps of:

2 (a) providing a data structure located in a memory or other memories; the data

3 structure including at least one font array;

4 (b) accessing said at least one font array; and

5 (c) rendering characters of said at least one font array into the appropriate
6 locations of a memory or other memories.

7 27. The method of claim 26 wherein any of the memories comprises a frame buffer.

8 28. The method of claim 26 wherein any of the memories comprises a system
9 memory.

1 29. The method of claim 26 in which said at least one font array includes a plurality of
2 characters.

1 30. The method of claim 29 in which each of the characters comprises one bit per
2 pixel.

1 31. The method of claim 29 in which each of the characters comprises a plurality of
2 bits per pixel.

1 32. The method of claim 26 in which said at least one font array comprises a plurality
2 of font arrays.

1 33. The method of claim 32 in which each of the plurality of font arrays includes a
2 plurality of characters.

1 34. The method of claim 33 wherein characters within different font arrays can be
2 different sizes.

1 35. The method of claim 34 in which each of the characters comprises one bit per
2 pixel.

1 36. The method of claim 34 in which each of the characters comprises a plurality of
2 bits per pixel.

1 37. The method of claim 26 in which includes:
2 a set of registers for utilizing the information within the plurality of font arrays
3 such that font characters can be efficiently retrieved from memory and can then be rendered in the
4 memory.

1 38. The method of claim 37 in which the set of registers includes a font pointer
2 register.

1 39. The method of claim 37 in which the set of registers includes a font pitch register.

1 40. The method of claim 37 in which the set of registers includes an index register.

1 41. The method of claim 37 which includes a horizontal information register.

42. The method of claim 37 which includes a vertical information register.

43. The method of claim 37 which includes a linear information register.

44. The method of claim 37 in which the set of registers further includes a glyph
information register which holds information retrieved by a graphics controller based upon the font
pitch register.

1 45. The method of claim 37 in which the set of registers further includes a glyph
2 information register which holds character information retrieved by a graphics controller based
3 upon the index register.

1 46. The method of claim 37 in which the set of registers includes a size width register.

47. The method of claim 37 in which the set of registers includes a size height register.

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